as every 0.5 second, or even faster. This arrangement also assures that also all fluid in the aliquot passage will be changed every time the passage returns to the first position.

IN THE CLAIMS

Please cancel claims 1, 3-7, 9, 13, 14 and 18-22 without prejudice, and add new claims 23-54, as follows:

Claims 1-22. (Canceled)

23. (New) A fluid transfer module for transferring a sample slug of dissolved analytes from of a high flow rate primary stream of dissolved analytes to a secondary stream leading to an analyzer for analysis of the analyte, said transfer module comprising:

a stator device having a first stator face, and defining

a primary passage extending along a primary path therethrough from an inlet end portion to an opposite outlet end portion thereof for passage of the primary stream of analytes continuously therethrough, said primary path intersecting said first stator face at a communication opening of the primary passage for fluid communication thereof,

an upstream secondary passage extending along a secondary path through said stator device, and including a first communication port disposed at said first stator face, and

a downstream secondary passage extending further along the secondary path, and including a second communication portion disposed at said first stator face and configured for fluid communication with the analyzer;

a rotor device having a rotor face in fluid-tight contact against said first stator face at an interface therebetween, said rotor face defining an aliquot channel in fluid communication with said interface,

wherein, in a first rotor position, said aliquot channel is aligned in fluid communication with said communication opening of the primary passage to acquire a sample slug of analyte therein, and in a second rotor position, said aliquot channel is aligned with both said first communication port of the upstream secondary passage and second communication port of the downstream secondary passage to enable transfer of substantially all of the sample slug in a uniform flow manner through the downstream secondary stator passage to the analyzer.

24. (New) The transfer module described in claim 23, wherein

said primary passage has a transverse cross-sectional dimension greater than that of the secondary passages.

25. (New) The transfer module described in claim 23, wherein

said rotor face further includes a flowthrough channel in fluid communication with said interface such that, in said first rotor position, one portion of the flowthrough channel is aligned with said first communication port of the upstream secondary passage and another portion of the flowthrough channel is aligned with said second communication port of the downstream secondary passage to enable the passage of a carrier fluid along the secondary path.

26. (New) The transfer module described in claim 23, wherein

said primary passage includes a first primary passage portion containing the inlet end portion on one end thereof, and an opposite first communication port terminating at said first stator face and forming a portion of said communication opening, and includes a second primary passage portion containing the outlet end portion on one end thereof, and an opposite

second communication port terminating at said first stator face and forming another portion of said communication opening.

27. (New) The transfer module described in claim 26, wherein

said first primary passage and said second primary passage intersect at a juncture to enable said continuous flow the primary stream along the primary path.

28. (New) The transfer module described in claim 27, wherein

said primary passage is substantially V-shaped having said communication opening disposed substantially at an apex portion thereof.

29. (New) The transfer module described in claim 28, wherein

said stator device further includes a second stator face spaced-apart from said first stator face, said inlet end portion and said outlet end portion terminating at said second stator face.

30. (New) The transfer module described in claim 29, wherein

said first primary passage portion and said second primary passage portion intersect one another an acute angle relative one another.

31. (New) The transfer module described in claim 29, wherein

said upstream secondary passage including an inlet port, opposite said first communication port, and disposed at said second stator face, and

said downstream secondary passage including an outlet port, opposite said second communication port, and disposed at said second stator face.

32. (New) The transfer module described in claim 23, wherein

said first stator face and said rotor face are substantially planar, forming a substantially planar interface therebetween.

33. (New) The transfer module described in claim 32, wherein

said rotor face is adapted to rotate about a rotational axis oriented substantially perpendicular to said interface plane, between the first position and the second position.

34. (New) The transfer module described in claim 33, wherein

said rotor face defines a plurality of aliquot channels, each in fluid communication with said interface, and each having a discrete volume different from one another; and

wherein, in a discrete one of first rotor positions, a respective one of the plurality of aliquot channels is aligned in fluid communication with said communication opening of the primary passage to acquire a sample slug of analyte therein, and in a discrete one of second rotor position, the respective one aliquot channel is aligned with both said first communication port of the upstream secondary passage and said second communication port of the downstream secondary passage to enable transfer of substantially all of the sample slug in a uniform flow manner through the downstream secondary stator passage to the analyzer.

35. (New) The transfer module described in claim 23, wherein

said rotor face is substantially circular shaped and faces outwardly, and said first stator face is substantially circular shaped and faces inwardly, opposite said rotor face such that said interface therebetween is annular-shaped, having a longitudinal axis oriented substantially co-axial with a rotational axis of said rotor face.

36. (New) The transfer module described in claim 23, wherein

said aliquot channel is substantially linear, and disposed in said rotor face such that said aliquot channel is substantially continuously open to said interface from one side portion of the channel to the another side portion thereof.

37. (New) The transfer module described in claim 36 wherein

said first communication port is spaced-apart from said second communication port, and said aliquot channel is dimensioned and oriented such that, in said second position, said one side portion of the aliquot channel is in fluid communication with said first communication port, and said another side portion thereof is in fluid communication with said second communication port.

38. (New) The transfer module described in claim 23 wherein

said first communication port of said upstream secondary passage is spaced-apart from, and independent of, said second communication port of said downstream secondary passage,

and said aliquot channel extends through said rotor device having an upstream opening and a spaced-apart, independent, downstream opening, such that, in said first position, said upstream opening and said downstream opening are both aligned with said communication opening of said primary passage, and in said second position, said upstream opening is aligned with said first communication port of said upstream secondary passage and said downstream opening is aligned with said second communication port of the downstream secondary passage.

39. (New) The transfer module described in claim 23 further including:

a source of high pressure fluid that includes a mixture of said analytes with a mobile phase fluid, said source connected to said primary stream to flow to said primary passage.

40. (New) The transfer module described in claim 23 further including:

an actuator device coupled to said rotor device for selective rotational movement of said rotor face between said first position and said second position.

41. (New) A fluid transfer module for transferring a sample slug of dissolved analytes from of a high flow rate primary stream of dissolved analytes to a secondary stream in flow communication with an analyzer for analysis of the sample slug of analyte, said transfer module comprising:

a stator device having a first stator face, and defining a pair of primary passages and a pair of secondary passages, said primary passages intersecting in said stator device at a bypass juncture to collectively define a primary path therethrough that enables the continuous flow of the primary stream, and each said primary passage having a communication opening terminating at said first stator face for fluid communication therewith, and said secondary passages each having a communication port terminating at said first stator face for fluid communication therewith, and one of said secondary passages being adapted for fluid communication with said analyzer; and

a rotor device having a rotor face in fluid-tight contact against said first stator face, said rotor face defining an aliquot channel having a first end portion and an opposite second end portion, and said rotor face being movable between a discrete first portion and a discrete second position relative to said first stator face;

wherein, in said first position of said rotor device, said first end portion and said second end portion of said aliquot channel being aligned with a respective communication

opening of said primary passages for fluid communication with said primary stream to acquire a sample slug of analyte therein, and, in said second position of said rotor device, said first end portion and said second end portion of said aliquot channel being aligned with a respective communication port of said secondary passages to enable transfer of substantially all of the sample slug in a uniform flow manner through the one secondary passage to the analyzer.

42. (New) The transfer module described in claim 40, wherein

said rotor face further includes a flowthrough channel in fluid communication with said interface such that, in said first rotor position, one portion of the flowthrough channel is aligned with a respective communication port of one secondary passage and another portion of the flowthrough channel is aligned with a respective communication port of the other secondary passage to enable the passage of a carrier fluid through the pair of secondary passages.

43. (New) The transfer module described in claim 40, wherein

said pair of primary passages collectively form a substantially V-shaped primary path through said stator device, having said communication openings merged together and disposed substantially at an apex portion thereof.

44. (New) The transfer module described in claim 42, wherein

said pair of primary passages intersect one another an acute angle.

45. (New) The transfer module described in claim 41, wherein

said stator device further includes a second stator face spaced-apart from said first stator face, and said pair of primary passages and said pair of secondary passages extend therethrough from said first stator face to said second stator face.

46. (New) The transfer module described in claim 44, wherein

the other of said secondary passages includes an outlet port disposed at said second stator face for the outlet flow of the carrier fluid therethrough to the analyzer, and

the one of said secondary passages includes an inlet port disposed at said second stator face for the inlet flow of the carrier fluid therethrough to the respective communication port.

47. (New) The transfer module described in claim 40, wherein

said first stator face and said rotor face are substantially planar, forming a substantially planar interface therebetween.

48. (New) The transfer module described in claim 46, wherein

said rotor face is adapted to rotate about a rotational axis oriented substantially perpendicular to said interface plane, between the first position and the second position.

49. (New) The transfer module described in claim 47, wherein

said rotor face defines a plurality of aliquot channels, each in fluid communication with said interface, and each having a discrete volume different from one another; and

wherein, in a discrete one of first rotor positions of said rotor device, a first end portion and a second end portion of a respective one of the plurality of aliquot channels is aligned in fluid communication with a respective communication opening of said primary

passages for fluid communication with said primary stream to acquire a sample slug of analyte therein, and in a discrete one of second rotor position of said rotor device, said first end portion and said second end portion of the respective one aliquot channel is aligned with a respective communication port of said secondary passages to enable transfer of substantially all of the sample slug in a uniform flow manner through the one secondary passage to the analyzer.

50. (New) The transfer module described in claim 40, wherein

said rotor face is substantially circular shaped and faces outwardly, and said first stator face is substantially circular shaped and faces inwardly, opposite said rotor face such that said interface therebetween is annular-shaped, having a longitudinal axis oriented substantially co-axial with a rotational axis of said rotor face.

51. (New) The transfer module described in claim 49, wherein

said rotor face defines a plurality of aliquot channels, each in fluid communication with said interface, and each having a discrete volume different from one another; and

wherein, in a discrete one of first rotor positions of said rotor device, a first end portion and a second end portion of a respective one of the plurality of aliquot channels is aligned in fluid communication with a respective communication opening of said primary passages for fluid communication with said primary stream to acquire a sample slug of analyte therein, and in a discrete one of second rotor position of said rotor device, said first end portion and said second end portion of the respective one aliquot channel is aligned with a respective communication port of said secondary passages to enable transfer of substantially all of the sample slug in a uniform flow manner through the one secondary passage to the analyzer.